America's Election System and the Fall of Duverger's Law

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Abstract

The purpose of this study is to determine if America has outgrown its current system of elections and what kind of reform it needs. This research is being conducted in order to determine whether the Electoral College is still a viable means of electing leaders or no longer represents the wants and needs of the American people. This is done by comparing the United States' system to other global systems using Duverger's Law to determine which system functions best for the American government and its citizens. The results of my research show flaws in one of the most important theories of political science.

Introduction

The past elections in America have been some of the most contentious elections in U.S. election history, in addition to Bush vs. Gore in 2000 (Pruitt, 2017). These elections have been increasingly polarized, leaving moderate voters the choice between candidates who do not align to their political values. As a result, many undecided, moderate, and even partisan voters are longing for a viable third option. To be exact, in February of 2020, 62% of Americans believed that a third party is needed in America; this is an increase from 57% in September of 2021 (Jones, 2021). This is the highest support for a viable third party in history, with the second highest being 61% in 2017 (Jones, 2021). The percentage of each party that favored a third-party option in January 2021 is shown in Figure 1. However, the current election system, which utilizes the Electoral College and the simple majority system, makes a third-party win very difficult. Before running for running for the Democratic nomination in 2020, former New York City Mayor Mike Bloomberg almost ran as a 3rd party candidate in 2016. However, he stated, "The data was very clear and very consistent. Given the strong pull of partisanship and the realities of the Electoral College system, there is no way an independent can win. That is truer today than ever before" (Feist, 2019). What he means by this is that higher levels of polarization and partisanship in today's elections mean that a 3rd-party candidate can almost never win. So in order to allow for viable 3rd-party candidates, reformation or abolition of the Electoral College is needed. While the past two elections have made voters more desirous of a 3rd party, is this simply because of the nature of the past two elections, or is it rather a symptom of an outdated election system?

Theory and Hypothesis

My goal is to determine if the United States has outgrown its current election system and to compare it to international systems in order to determine the best solution. To properly test this hypothesis, the test will be split into two separate parts. The first part is a hypothesis based on Duverger's Law and tests what effect the political system has on the participation in elections. In accordance with Duverger's Law, Hypothesis One states that the more a country favors a simple-majority system, the fewer major political parties it is likely to have. So the test should result in higher voter turnout in countries that have proportional representation. The test for this hypothesis will help to either support or undermine Duverger's Law, by comparing single-member districts (SMD) versus proportional representation (PR) and their voter turnout in each country. According to Duverger's Law, all proportional representation systems should stimulate voter turnout, and single-member districts should suppress it. The independent variable in this test is the type of electoral system, while the dependent variable is the voter turnout. For reference, the United States currently uses a
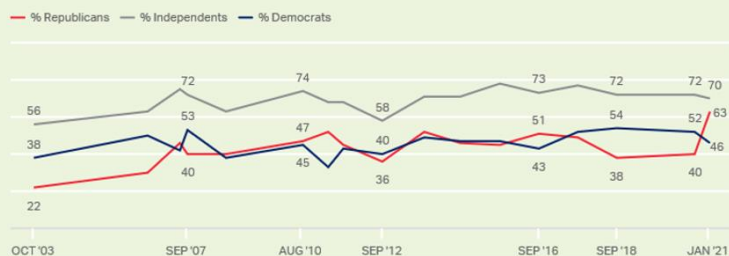

Figure 1: Percentage of each party that favored a third-party option in January 2021

single-member district system, also known as single-member plurality elections. To provide a solution to Hypothesis One, the results will be compared to the popularity of the election system in the United States to see if they coincide with voter turnout in America. However, this test could also speak to the popularity and trust in each system on a global level.

Review of Literature

Duverger's Law

Maurice Duverger is one of the most esteemed and well-known political scientists to this date; he wore many hats during his career. Duverger founded one of the first political science programs in the world at the University of Bordeaux. During this time, he also served as a jurist, which is someone who specializes in or writes law. He is most recognized for his work on Duverger's Law, which has people who either support its results or completely disagree with the results. Since 1951, when Duverger's Law was published, it has served as the cornerstone to defining political systems and their respective parties. This law has been a source of contention between those who believe it to be valid and those who believe it to be false. The law states that "the simple-majority, single-ballot system favours the two-party system," as well as "both the simple-majority system with second ballot and proportional representation favour multi-partism" (Duverger, 1951). Since the law was first formulated, it has been contested and reviewed by political scientists around the globe. Many of them have concluded that the law is actually two statements, with the first half, regarding simple majority, being a law, while the second half, regarding simple majority with second-party and proportional representations, is falsifiable. While the first is referred to as "Duverger's Law," the second is commonly referred to as "Duverger's Hypothesis." Both of these will play a key role in testing the American election system in comparison to the other global systems.

In their book *The Concise Oxford Dictionary of Politics, 3rd ed.*, McLean and McMillan state the following in regard to Duverger's Law: "The law is driven by the idea that in the long run, rational politicians and voters will realize that it is hopeless to have more than two parties competing at national level." In other words, two-party systems can last only so long. This begs the question of how long is too long? Additionally, America's system may have shown that a two-party system can last only so long before it begins to malfunction, or it may have demonstrated that a two-party system can have longevity.

Proportional Representation vs. Single-Member District

There are two types of voter representation utilized by democracies throughout the world, which are *proportional representation* and *single-member districts*. Figure 2 shows the countries around the world and the number of representatives they have. The most common system used is
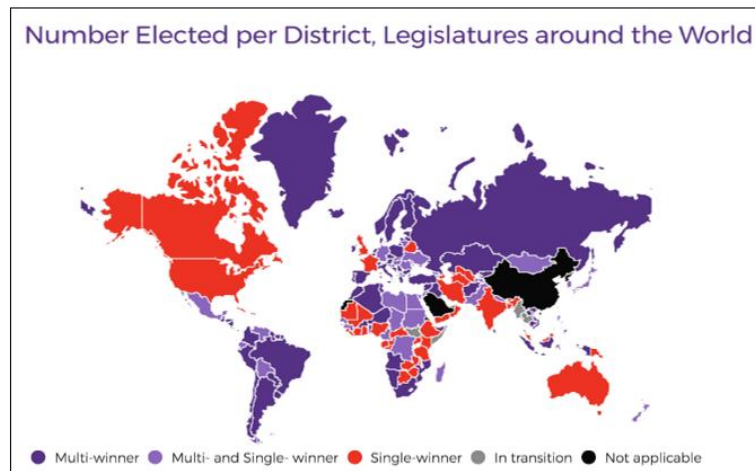

Figure 2: Number of representatives elected per district in each country. Source: U Vote BC

the single-member district, which is used by many countries around the globe, including the United States. These are also known as winner-take-all systems and first-past-the-post systems. As described in the Theory and Hypothesis, a single-member district is "an area…divided into a number of geographically-defined voting districts, each represented by a single elected official" (Fairvote.org). Some examples of single-member district systems are the United States and France. This is the type of system that Duverger stated would lead to a two-party system. While this is the most common system, it is not without flaws. One of the main issues is that "Voters can only vote for their district's representative, with the highest vote-getter winning election, even if he or she has received less than half of the vote" (Fairvote.org). This is the problem that the American Electoral College system has encountered in some of the past presidential elections. In 2016, Donald Trump won the Electoral College vote, while Hillary Clinton won the popular vote; in 2000, Al Gore won the popular vote, but George W. Bush won the Electoral College vote. In addition to these issues, single-member districts are also prone to the manipulation of land space, also known as *gerrymandering* in the U.S. This process is done by redrawing districts "to protect incumbents or weaken political enemies" (Fairvote.org). This is a major issue in the United States and results in under-representation of minorities.

The other main type of democratic electoral system is proportional representation. There are several types of proportional representation systems, but they are all founded on the principle that "all voters deserve representation and that all political groups in society deserve to be represented in our legislatures in proportion to their strength in the electorate" (Fairvote.org). Some examples of countries that use proportional representation are Germany and Italy (Palese, 2018). One of the distinguishing characteristics in a proportional representation system is that all of the districts are often multi-member districts. The number of representatives from each district is dependent upon the

population of the district. Another characteristic is that the seats are divided up among the representatives, based on the percentage of the vote that the candidate/ party received in the election. These two characteristics make up the basis on which a proportional representation system functions. Proportional representation includes many advantages, such as proportional representation; however, it does have some disadvantages. Some of the main concerns about this system are that it "can potentially provide a route for extremists to force their way into the political mainstream" and that "The adoption of PR list systems weakens the link between the elected representative and his or her constituency" (UK Engage, 2013).

How the Electoral College Functions

The Electoral College was born out of compromise and uncertainty in democratically elected leaders. At the time its conception, the United States was the only country in the world to democratically elect its leaders and was building a system from scratch with no point of reference. The Electoral College was created as a part of the Great Compromise in 1787 (Ginsberg *et al*., 2021). The Electoral College was initially created because the framers of the Constitution believed that the majority of 18th-century voters lacked the resources to know adequate information about the candidates who were running, specifically in rural areas of the country (Ginsberg *et al.,* 2021). In order to combat this, they created a system in which the voters cast their votes to elect electors, who would then cast votes for the president based on what the voters chose. This was instituted to prevent an uneducated group of citizens from having too much sway over the nation's leadership (Ginsberg *et al.,* 2021). The number of electors that each state got was divided up by population; however, the Southern states, who had a low voting population compared to the North, were appeased by the Three-Fifths Compromise, which gave the South more voting power by exploiting their slave populations, counting each slave as only 3/5 of a person, but not giving African-Americans the vote (Roos, 2019).

In modern elections, electors are still decided based on population. Each state is guaranteed at least 3 electors, 2 for each of its Senators and 1 for their House Representative (Ginsberg *et al*., 2021). The states are then given more electors based on the number of Representatives that they have in the House (Ginsberg *et al*., 2021). This aspect guarantees that small states have a say in the national election, but it has become controversial in the past years because this means that each person's vote has different value. On average, 1 electoral vote represents the votes of 565,166 people (Fairvote.org). This makes individual votes in small states worth more than votes in large states. "Wyoming's three electoral votes corresponds to 177,556 people. In other words, these people have 3.18 times as much clout in the Electoral College as an average American, or

318%" (Fairvote.org). The percentage of individuals who would prefer a popular vote over the current electoral system is depicted in Figure 3. The imbalance in power of votes is another driving force behind the desire for a new election system such as a popular-vote presidential election and more parties to break up this power.
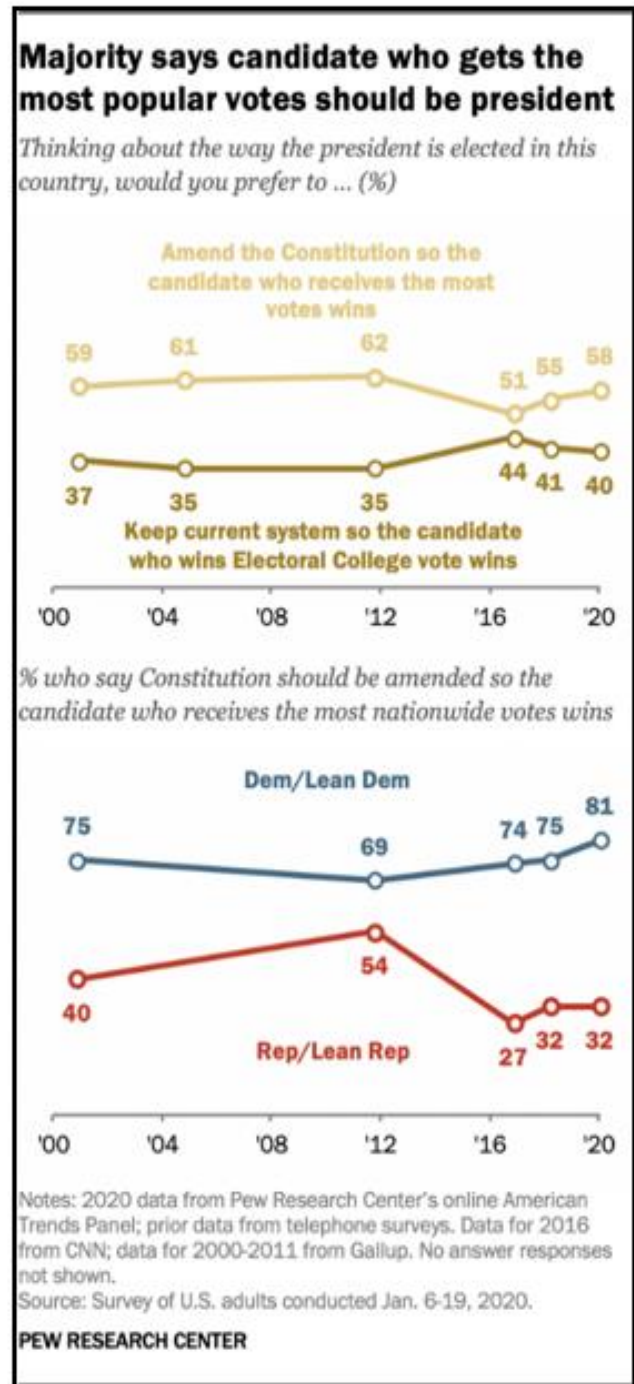

Figure 3. Percentage of individuals who would prefer a popular vote over the current electoral system
Source: Pew Research Center

Polarization

America has had a two-party dominated system for more than 200 years, and while it does not always function perfectly, it is transformative that it has lasted as long as it has. However, U.S. elections have become more and more polarized and contentious over the past 20 to 30 years. According to the Pew Research Center, "Political polarization—the vast and growing gap between liberals and conservatives, Republicans and Democrats—is a defining feature of American politics today." Kenneth Benoit (2006), Professor of Computational Social Science at the London School of Economics and Political Science, refers to Duverger's perspective on polarization in his scholarly journal, *Duverger's Law and the Study of Electoral Systems.* In regard to Duverger's stance on polarization, he states:

> *Polarization* occurs in the simple-majority, single-member district system as the rules produce disproportional outcomes by rewarding larger parties seat shares greater than their vote shares, and conversely punishing smaller parties with seat shares less than their vote shares. *Depolarization* is the opposite process, where under PR electoral rules, voters sincerely favoring small parties are able to support those parties, knowing that even small parties may win seats, and consequently small parties are encouraged to form. (Benoit, 2006)

According to the Pew Research Center, the degree of polarization continues to grow. "The share of Americans with ideologically consistent values has increased over this time, and these political values also have become more strongly associated with partisanship" (Pew Research Center, 2017). This spread between parties is depicted in Figures 4 and 5, which depict how far each party has spread from each other between 1994 and 2017. Partisanship is similar to polarization in this respect. This polarization leaves moderates being forced to decide between two parties that support issues far from their core beliefs, highlighting the need for a viable third party. However, is this a viable concept to be introduced into the United States?

Figure 6: U.S. political party list and their founding dates. Source: Lily Warren "Political Philosophy Political Campaign"

Third Parties

The presence of third parties in U.S. elections is not new. Small parties such as the Libertarian and Green Parties have been participating in elections for a while. Figure 6 shows a list of the United States' political parties, including the two major parties, the Democratic Party and the Republican Party. However, none of the third parties have a viable shot, other than to possibly steal some votes from the two major parties. This has contributed to the election victories for major parties. For example, in the contentious election of 2000, Ralph Nader ran as the Green Party candidate. The election came down to the state of Florida to decide who would be President between the two major candidates, George Bush, and Al Gore. The votes that Ralph Nader garnered in the state would have most likely gone to Gore if Nader had not run. If these votes had gone to Gore, it is likely that he could have become President in 2000. The influence of third parties is undeniable; however, their influence could be much greater, pending election reform in the United States. In theory, this could create more cooperation between parties and allow for more compromise on divisive issues. But is the U.S. ready for a viable third party? The possibility of a viable third party being allowed to enter into the U.S. elections system starts with a choice
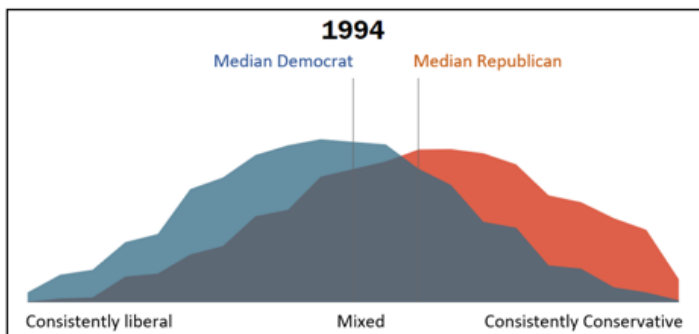

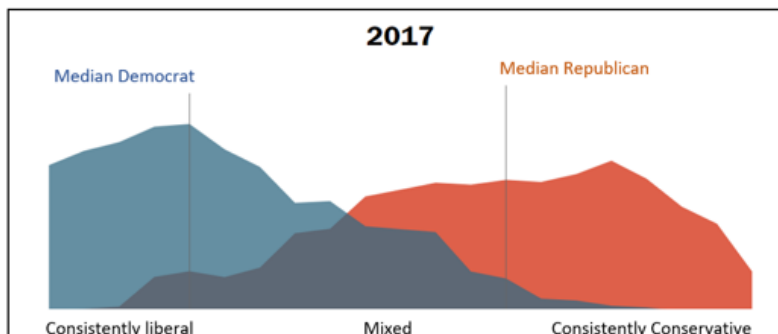Figure 4: Spread between U.S. political parties, 1994 Source: Pew Research Center

Figure 5: Spread between U.S. political parties, 2017 Source: Pew Research Center

between the use of single-member districts and proportional representation.

Test

In order to properly test Duverger's Law, I worked with Dr. John A. Tures to compile data and run an accurate test. This was done by gathering data on election systems from all 193 countries around the world. To do this, I first found information on what type of elections system each country has. Autocratic/Other countries were assigned a 0; Single-Member Districts or Plurality/Majority countries were assigned a 1; countries with a mixed system were assigned a 2; and countries that utilized proportional representation were assigned a 3. Countries with a 0 were omitted from the test, due to their lack of a democratically elected system. Some examples of countries that were left out of the test are Afghanistan and Venezuela. The data that is utilized in the test is from International IDEA Institute (2020). The independent variable in this test was what kind of system the country had. For this section, the numbers were assigned as follows; 0 = Single-Member District or Plurality/Majority, 1 = Party List/Proportional Representation. The dependent variable in this test was voter turnout divided into two sections: above-average voter turnout or below-average voter turnout. Above-average voter turnout was assigned a 1, while below-average voter turnout was assigned a 0. Each outcome of the test was also assigned a number. A "1" indicates a single-member district electoral system with a below-average voting turnout. A "2" indicates a proportional representation electoral system and a below-average voting turnout. A "3" indicates a single-member district electoral system with an above-average voting turnout. A "4" indicates a proportional representation electoral system with an above-average voter turnout. In order to display the results of this data, I used a 2x2 table to show the relationship among all variables. This data was then used to conduct a chi-square test to determine if it was significant at the .05 level.

Results

The results of the test are below including the 2x2 table and the chi-square results. In the data table, *SMD* represents single-member districts and *PR* represents

Table 1: 2x2 Data Test Results

		DV	
		0 = Below Average Voting Turnout	1 = Above Average Voting Turnout
	0 = SMD	24	40
IV	1 = PR	38	39

Table 2: Chi-Square Test Results

The chi-square statistic is 1.9923. The p-value is .1581. The result is not significant at p < .05.

	Below average voting turnout	Above Average Voting Turnout	Row Totals
SMD	24 (28.14)	40 (35.86)	64
PR	38 (33.86)	39 (43.14)	77
Column Totals	62	79	141

proportional representation. As indicated in Table 2, the chi-square statistic is 1.9923. The p-value is .1581. A *p-value* is "the probability of obtaining results at least as extreme as the observed results of a statistical hypothesis test, assuming that the null hypothesis is correct" (Beers, 2021). As an outcome, the result is not significant at the .05 level or is not significant at p < .05. According to the chi-square test, this means that there is not a significant relationship between what type of electoral system a country has and the voter turnout in that country.

While the result of the chi-square test is not significant, the findings of this overall test are. Based on the data in Table 2, the expected averages, numbers in parentheses, were not equal. For example, there was expected to be 43.14 cases of proportional representation systems with above-average voting turnout, but there were only 39 cases. On the contrary, there was expected to be only 35.86 cases of single-member districts systems with above-average voter turnout, but after the test, there was 40 cases. Overall, proportional representation electoral systems were expected to have a higher voter turnout; however, single-member district electoral systems had the highest voter turnout and had fewer cases of below-average voter turnout than proportional representation. This is important because it calls into question whether Duverger's Law should be classified as a law or not. As previously thought, proportional representation systems should have the higher voter turnout; however, as the data has shown, it does not carry the higher voter turnout. This law worked for some of the countries tested, such as the United States, which was given a "1." This means the U.S. has a single-member district electoral system with a below-average voter turnout. However, countries such as Canada, which uses a single-member district electoral system, had an above-average voter turnout. As stated earlier, based on Duverger's Law, all proportional representation systems should stimulate turnout, and single-member districts should suppress it. These test results show the opposite. While the results were not significant, the fact that the results significantly support a statement that is considered to be a scientific law is cause for attention.

Conclusion

The results of this test point to major flaws within Duverger's Law and beliefs in how our global election system works. The major flaw is that Duverger's Law cannot accurately describe how the current election systems work. Duverger may have been right when he created his law in 1951; however, the world's election systems are constantly changing, with information and the ability to vote becoming easier for individuals across the globe. As a result of the test on Duverger's Law, the assumption can be made that it is not a sound basis for determining a nation's election system. Single-member district and proportional electoral systems

have differing voter turnout from country to country and are not dependent on the type of electoral system.

So what does this mean for America's election system? With the growing unpopularity of its current system and a below-average voter turnout, the United States has reached a crossroads where sooner or later it will have to reform its election system. This is because of increased polarization between the major parties, dissatisfaction in the outcomes of several contentious elections, and the value of individual votes varying state by state. Duverger's Law does not provide an outright blueprint for the U.S. to follow in order to fix its current system. However, the United States has created an election system with no blueprint before: The Electoral College. The country can do it again, using this information about how well each system works for other nations. The creation of an election system, or amendment of the current election system, will require the commitment of undoing an election system that has been used for over two centuries. However, the controversy surrounding the more recent presidential races should serve as motivation to explore a resolution to the unrest surrounding America's elections.

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